

Mr. James Fearnow  
Structural Composites of Indiana, Inc.  
1118 Gerber Street  
Ligonier, IN 46767

Re: 113-12175  
Notice-only change to  
MSOP 113-11385-00074

Dear Mr. Fearnow:

Structural Composites of Indiana, Inc. was issued a permit on March 3, 2000 for a stationary customized fiberglass parts manufacturing plant. A letter notifying the Office of Air Management of the addition of five (5) small combustion units and some minor administrative changes was received on April 17, 2000. Pursuant to the provisions of 326 IAC 2-6.1-6 the permit is hereby revised as follows:

1. The source description listed under Section A.2, page 4 of 24, is revised as follows to reflect the addition of the five (5) new combustion units and to more accurately describe the gel and lamination area and the grinding room (changes are bolded and stricken out for emphasis):
  - ~~— (a) One (1) gelcoat booth equipped with air-assisted airless spray guns with dry filters for air pollution control, approximate capacity 184 pounds of resin per hour.~~
  - ~~— (b) One (1) lamination booth equipped with flow coater equipment with dry filters for air pollution control, approximate capacity 720 pounds of resin per hour.~~
  - (a) One (1) gel and lamination area consisting of a gel coating process with air-assisted airless spray guns, dry filters for air pollution control and an approximate capacity of 184 pounds of resin per hour, a lamination process with flow coater equipment, dry filters for air pollution control, and an approximate capacity 720 pounds of resin per hour and three (3) exhaust fans with a flow rate of 10,000 CFM.**
  - ~~(b)~~ One (1) mold preparation and final finish area equipped with spray guns with dry filters for air pollution control.
  - ~~(c)~~ One (1) bulk resin storage tank, capacity 6000 gallons.
  - ~~(d)~~ Five (5) radiant heaters, natural gas-fired, capacity 0.03 MMBtu per hour each.
  - ~~(e)~~ One (1) grinding booth equipped with grinders, diamond cutters and various hand tools, with dry filters for air pollution control.

- (f) **One (1) natural gas-fired air make-up system, with a maximum heat input capacity of 3.575 MMBtu per hour and exhausts to the atmosphere.**
  - (g) **Three (3) natural gas-fired radiant heaters, with a maximum heat input capacity of 0.15 MMBtu per hour per unit and exhaust to the atmosphere.**
  - (h) **One (1) natural gas-fired oven, with a maximum heat input capacity of 0.225 MMBtu per hour and exhausts to the atmosphere.**
2. The facility description listed under Section D.1, page 17 of 24, is revised as follows to reflect the new units (changes are bolded and stricken out for emphasis):
- ~~(a) One (1) gelcoat booth equipped with air-assisted airless spray guns with dry filters for air pollution control, approximate capacity 184 pounds of resin per hour.~~
  - ~~(b) One (1) lamination booth equipped with flow coater equipment with dry filters for air pollution control, approximate capacity 720 pounds of resin per hour.~~
  - (a) **One (1) gel and lamination area consisting of a gel coating process with air-assisted airless spray guns, dry filters for air pollution control and an approximate capacity of 184 pounds of resin per hour, a lamination process with flow coater equipment, dry filters for air pollution control, and an approximate capacity 720 pounds of resin per hour and three (3) exhaust fans with a flow of 10,000 CFM.**
  - ~~(b)~~ One (1) mold preparation and final finish area equipped with spray guns with dry filters for air pollution control.
  - ~~(c)~~ One (1) bulk resin storage tank, capacity 6000 gallons.
  - ~~(d)~~ Five (5) radiant heaters, natural gas-fired, capacity 0.03 MMBTU per hour each.
  - (e) **One (1) natural gas-fired air make-up system, with a maximum heat input capacity of 3.575 MMBtu/hr and exhausts to the atmosphere.**
  - (f) **Three (3) natural gas-fired radiant heaters, with a maximum heat input capacity of 0.15 MMBtu/hr per unit and exhaust to the atmosphere.**
  - (g) **One (1) natural gas-fired oven, with a maximum heat input capacity of 0.225 MMBtu/hr and exhausts to the atmosphere.**
3. The OAM acknowledges that the grinding process vents to internal filters inside the booth as stated in the permit under A.2(e) and D.2.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this letter and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Nysa L. James, at (800) 451-6027, press 0 and ask for Nysa L. James or extension (3-6875), or dial (317) 233-6875.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

Attachments

Reviewer's Initials

cc: File - Noble County  
U.S. EPA, Region V  
Noble County Health Department  
Air Compliance Section Inspector - Doyle Houser  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

**NEW SOURCE CONSTRUCTION PERMIT  
and MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR MANAGEMENT**

**Structural Composites of Indiana, Inc.  
1118 Gerber Street  
Ligonier, Indiana 46767**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 113-11385-00074	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: March 3, 2000
First Notice Only Change: 113-12175	Pages Affected: 4, 17 and 18
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary customized fiberglass parts manufacturing plant.

Authorized Individual: James Fearnow  
Source Address: 1118 Gerber Street, Ligonier, Indiana 46767  
Mailing Address: 1118 Gerber Street, Ligonier, Indiana 46767  
Phone Number: 219-894-4312  
SIC Code: 3089  
County Location: Noble  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD Rules  
Minor Source, under Section 112 of the Clean Air Act

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) gel and lamination area consisting of a gel coating process with air-assisted airless spray guns, dry filters for air pollution control and an approximate capacity of 184 pounds of resin per hour, a lamination process with flow coater equipment, dry filters for air pollution control, and an approximate capacity 720 pounds of resin per hour and three (3) exhaust fans with a flow rate of 10,000 CFM.
- (b) One (1) mold preparation and final finish area equipped with spray guns with dry filters for air pollution control.
- (c) One (1) bulk resin storage tank, capacity 6000 gallons.
- (d) Five (5) radiant heaters, natural gas-fired, capacity 0.03 MMBtu per hour each.
- (e) One (1) grinding booth equipped with grinders, diamond cutters and various hand tools, with dry filters for air pollution control.
- (f) One (1) natural gas-fired air make-up system, with a maximum heat input capacity of 3.575 MMBtu per hour and exhausts to the atmosphere.
- (g) Three (3) natural gas-fired radiant heaters, with a maximum heat input capacity of 0.15 MMBtu per hour per unit and exhaust to the atmosphere.
- (h) One (1) natural gas-fired oven, with a maximum heat input capacity of 0.225 MMBtu per hour and exhausts to the atmosphere.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

## SECTION D.1

## EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description - A customized fiberglass parts manufacturing source consisting of the following:

- (a) One (1) gel and lamination area consisting of a gel coating process with air-assisted airless spray guns, dry filters for air pollution control and an approximate capacity of 184 pounds of resin per hour, a lamination process with flow coater equipment, dry filters for air pollution control, and an approximate capacity 720 pounds of resin per hour and three (3) exhaust fans with a flow rate of 10,000 CFM..
- (b) One (1) mold preparation and final finish area equipped with spray guns with dry filters for air pollution control.
- (c) One (1) bulk resin storage tank, capacity 6000 gallons.
- (d) Five (5) radiant heaters, natural gas-fired, capacity 0.03 MMBtu per hour each.
- (e) One (1) natural gas-fired air make-up system, with a maximum heat input capacity of 3.575 MMBtu per hour and exhausts to the atmosphere.
- (f) Three (3) natural gas-fired radiant heaters, with a maximum heat input capacity of 0.15 MMBtu per hour per unit and exhaust to the atmosphere.
- (g) One (1) natural gas-fired oven, with a maximum heat input capacity of 0.225 MMBtu per hour and exhausts to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.1.1 New Source Toxics Control [326 IAC 2-4.1-1]

Pursuant to the MACT determination under 326 IAC 2-4.1-1, operating conditions for the new customized fiberglass part manufacturing source shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAP from use of such resins and gel coats only shall be less than 100 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
  - (2) The emission factors approved for use by IDEM, OAM shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit.

For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.

- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:

Type of Gel Coat or Resin	HAP Monomer Content, % by weight
Production <sup>1</sup> Gel Coat	37
Tooling <sup>2</sup> Gel Coat	38
Production Resin	35
Tooling Resin	43

<sup>1</sup> Production refers to the manufacture of parts.

<sup>2</sup> Tooling refers to the manufacture of the molds from which parts are manufactured.

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAM may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) # (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) \* EF (HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAM.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are